UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

0600002

REPLY TO THE ATTENTION OF SE-5J

MEMORANDUM

DATE: SEP 2 6 2001

SUBJECT: ACTION MEMORANDUM - Request for Approval of a $2 million Exemption for a Time Critical Removal Action at the Lefton Iron and Metal Site, East St. Louis, St. Clair County, Illinois

FROM: Kevin R. Turner, On-Scene Coordinator
Emergency Response Section 2
Michael D. Harris, On-Scene Coordinator
Emergency Response Section 2
Thomas Cook, On-Scene Coordinator
Emergency Response Section 3

TO: William E. Muno, Director
Superfund Division

THRU: Richard Karl, Chief R Karl
Emergency Response Branch
Site ID#: 05NE

I. PURPOSE

The purpose of this memorandum is to request approval to expend up to $3,158,447 to abate an imminent and substantial threat to public health and the environment present at the Lefton Iron and Metal Site, East St. Louis, Cahokia County, Illinois (Latitude - 38° 37'01" North and Longitude - 90° 09'16" West). This action is necessary to mitigate the immediate threat to public health and the environment posed by the presence of uncontrolled hazardous wastes on site, including soils containing PCBs and lead.

The response action proposed herein will mitigate site conditions by removal and off-site disposal of the contaminated soil. The high levels of PCBs and lead in surface soil at concentrations considered hazardous, the Site's proximity to residential properties and other business requires that this action be classified as a time critical removal. The project will require an estimated 182 working days to complete.

There are no nationally significant or precedent setting issues associated with the Lefton Iron and Metal Site. The Lefton Iron and Metal Site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # ILD984809244

A. Site Description

1. Site history

The Lefton Iron and Metal Site had previously received a complaint alleging that PCBs were present at the site. The Illinois Environmental Protection Agency was able to gain access and sample Yard 1 and the area behind Yard 2. PCBs were detected at concentrations above 50 mg/kg. The State was never able to gain access to yard 2 or a response by the PRPs and thus requested the assistance of the U.S. EPA.

2. Physical location

The Site is allegedly the former location of a metal scrap yard. The Lefton Site consists of two facilities, Yard 1 which is located at 205 South 17th Street, and Yard 2 which is located at 1901 Converse Avenue. Both yards lie within the city boundaries of East St. Louis, Illinois. The Site is located in a mixed residential/industrial community. Yard 1 is bordered by railroad tracks to the northeast, 17th Street on the southeast, Brady Avenue on the southwest, and a commercial business to the northwest. Yard 2 and the area behind it, is bordered by Brady Avenue on the northeast, 19th Street on the northwest, Converse Avenue on the southwest, and a residential area on the southeast.

According to the Region 5 Superfund Environmental Justice Analysis, the group of residents closest to the site reside in census tract #5009, block group #5. This block group has a total population of 510. Of the 510, 100% are classified as minority. Approximately 73% of the families residing in this block group have an income of less than the established state low income level. The demographic conditions indicate an environmental justice priority for the community around this Site.

3. Removal site evaluation

Site assessment activities were conducted at the Lefton Iron and Metal Site by START and U.S. EPA personnel on September 11-13, 2001. The START field crew consisted of Joe Parish, Art Currier, Brian Schlieger, and Jason Massey from Tetra Tech, and Keith Hughes from Project Resources, Inc. (PR). U.S. EPA on-scene coordinator (OSC) Kevin Turner.

START was tasked to document site conditions, collect soil samples, and prepare and submit samples for laboratory analysis. PR was tasked to screen the Site with a NITON™ x-ray fluorescent (XRF) spectrometer.

The Site was marked into a loose grid, and potentially sensitive areas identified by the OSC for sampling were indicated using survey flags or marking paint. During the 3 days of this investigation, XRF spectrometer readings (with 95 percent upper and lower confidence limits) were taken at each grid location (approximately every 30 to 50 feet) and at marked or flagged locations on bare soil that had been cleared of vegetation and humus.

The guidelines below were generally followed, but the samples submitted for laboratory analysis and parameters analyzed for were chosen by the OSC. Locations where XRF spectrometer readings for lead exceeded the PRG of 400 milligrams per kilogram (mg/kg) were marked as potential sampling points for laboratory analysis of Resource Conservation and Recovery Act (RCRA) metals. At sampling location 13, which had the highest XRF spectrometer reading, soil samples were screened with the XRF spectrometer down to 6 inches bgs, and a sample from this location was analyzed for RCRA metals, toxicity characteristic leaching procedure (TCLP) lead, polychlorinated biphenyls (PCB), semivolatile organic compounds (SVOC), volatile organic compounds (VOC), and pH.

On September 11-13, 2001, samples were collected using a stainless-steel auger and homogenized in pie pans for field screening at the ground surface and in increments of 6 inches down to 12 inches bgs at the locations. The auger was decontaminated after collection of each sample using Alconox and water with a final, deionized water rinse. Selected samples were placed in sample containers and submitted for laboratory analysis based on the field screening results and at the discretion of the OSC. Site assessment field work was completed on September 13, 2001.

B. State and Local Authorities' Role

1. State and local actions to date

The Lefton Iron and Metal Site came to the Removal Branch's attention through the Gateway Team. The Gateway Team funded the Illinois Department of Public Health (IDPH) to do soil lead screening in the City of East St. Louis. IDPH targeted old industries in its sampling efforts. The Gateway Team, through the direction of Noemi Emeric, convened an ad hoc group targeting lead as a contaminant of concern for East St. Louis. This group, which included St. Mary's Hospital, collected blood lead data from children in East St. Louis. The Removal Branch became involved based on the IDPH sample results showing high soil lead data in old industrial areas bordering residential areas (as high as 30,000 ppm) and the St. Mary's study showing children with elevated blood lead levels.

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Lefton Iron and Metal Corporation Site present an imminent and substantial threat to the public health, or welfare, and the environment and meet the criteria for a removal action provided for in the National Contingency Plan (NCP), Section 300.415, Paragraph (b)(2). 40 C.F.R. § 300.415(b)(2)(I), (iii) and (v), respectively, specifically allows removal actions for:

1) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

The Site is surrounded by several small businesses and is close to residences. The site is located in a mixed residential and industrial area. The accessibility of the contaminated area behind Yard 2, as well as the elevated levels of PCBs within that area, provided the potential for exposure by nearby population or animals. The health concerns at this Site are related to the uncontrolled access to the property and the evidence of trespassing on the property by the local population, potentially exposing young children, pregnant women and elderly individuals to high levels of lead and PCB contamination.

The effects of lead exposure are more severe for young children and the developing fetus through exposure to a pregnant woman. The harmful effects of lead included premature births, lower birth weight, decreased mental ability in the infant, learning difficulties, and reduced growth in young children. In adults, lead increases blood pressure, induces anemia as a result of the inhibition of hemoglobin synthesis, decreases reaction time, affects memory, and damages the male reproductive system. Lead is also considered by U.S. EPA to be a class B2 or probable human carcinogen. Toxicity information is summarized in the references, ATSDR, 1993 and U.S. EPA, 2000.

2) Hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate or pose a threat of release;

The elevated concentrations of PCBs and lead in the soils at the surface pose a threat of migration of contaminated materials due to rain or melting snow. There is also the possibility of airborne migration of PCBs absorbed to dust particles. People and animals contacting contaminated areas could track contaminants to other areas on-site as well off-site.

The IDPH and U.S. EPA XRF and analytical data documented total lead levels to be greater than 5,000 ppm at the surface and greater than 400 ppm at a depth of six inches. PCB levels were also found to be greater than 400 ppm. The U.S. EPA Site Assessment confirmed IDPH sampling results and further documented that elevated levels of lead and PCBs exist on site.

3) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

IDPH and U.S. EPA have documented that high levels of lead exists on the ground surface and down to a six inch depth. Heavy rains may cause further migration of contaminants off site. Winds could cause dust particles containing heavy metals and PCBs to migrate into the surrounding community. These weather conditions could result in a continued release of lead and PCBs described herein to the surrounding soil and air.

4) The availability of other appropriate federal or state response mechanisms to respond to the release.

As a member of the East St. Louis Lead Collaborative Partnership, the U.S. EPA has been asked to assist with clean up efforts at the Lefton Iron and Metal site. This site, as well as other sites in the area are a part of a cooperative effort to limit exposure to elevated lead for sensitive populations in East St. Louis. The Illinois Department of Public Health and the U.S. EPA - Region 5 Gateway Initiative asked the U.S. EPA - Region 5, Removal Program to proceed with a time-critical removal action at the Lefton Iron and Metal site. The State of Illinois, nor the City of East St. Louis has the funds to undertake removal of the elevated lead and PCBs found at this site.

IV. ENDANGERMENT DETERMINATION

Given the conditions at the Lefton Iron and Metal Site, the nature of the hazardous substances on site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. EXEMPTION FROM STATUTORY LIMITS

Consistent with 40 CFR § 300.415 (b) (5) (I), Region V has determined that an exemption to the $2 million statutory limit for removal actions is warranted for the following reasons:

1) There is an immediate risk to the public health or welfare or the environment;

The concentrations of PCBs, a suspected carcinogen, have been recorded in soil sampled in the subsurface, in concentrations of over 400 ppm. This material is a listed CERCLA hazardous material.

2) Assistance will not otherwise be provided on a timely basis.

The Gateway Team funded the Illinois Department of Public Health (IDPH) to do soil lead screening in the town of East St. Louis. IDPH targeted old industries in its sampling efforts. The

City of East St. Louis and IDPH has expressed they do not have the capability to fund this Time-Critical removal.

VI. PROPOSED ACTIONS AND ESTIMATED COSTS

The OSC proposes to undertake the following actions to mitigate threats posed by the presence of hazardous wastes at the Lefton Iron and Metal Site:

1) Develop and implement a site Health and Safety Plan, including an air monitoring plan and site contingency plan;

2) Develop and implement a site security plan;

3) Characterize, remove and properly dispose of hazardous substance and wastes (contaminated soils) located at the site in accordance with U.S. EPA's Off-Site Rule (40 CFR 300.440);

4) Backfill the excavated areas with clean material and topsoil. Restore and vegetate to prevent soil erosion.

The OSC has initiated planning for provision of post-removal site control consistent with the provisions of Section 300.41 5(I) of the NCP. The nature of this removal action, as well as the complete removal of all hazardous wastes from the site, will eliminate the need for any post removal site control.

The estimated costs to complete the above activities are summarized below. These activities will require an estimated 182 working days to complete.

The detailed cleanup contractor cost estimate is presented in Attachment 1 and estimated project costs are summarized below:

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS:

Cleanup Contractor	$ 2,484,607
Cleanup Contractor Contingency (15%)	$ 438,460
START	$ 85,800
TOTAL EXTRAMURAL COSTS	$ 3,008,867

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INTRAMURAL COSTS:	
U.S. EPA Direct Costs $30 X [(1560 Regional Hours) + 150 HQ Hours]	$ 51,300
U.S. EPA Indirect Costs $63 X (1560 Regional Hours)	$ 98,280
TOTAL INTRAMURAL COSTS	$ 149,580
TOTAL REMOVAL PROJECT CEILING ESTIMATE	$ 3,158,447

The response actions described in this memorandum directly address the actual or threatened release at the site of a hazardous substance, or of a pollutant, or of a contaminant which may pose an imminent and substantial endangerment to public health or welfare or to the environment. These response actions do not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

Applicable or Relevant and Appropriate Requirements

All applicable, relevant, and appropriate requirements (ARARs) will be complied with to the extent practicable. A letter was sent to Bruce Everetts of the Illinois EPA on September 26, 2001 requesting that the Illinois EPA identify State ARARs. Any State or Federal ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

VII. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if no action of delayed action ensues.

VIII. OUTSTANDING POLICY ISSUES

None.

IX. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential Addendum (see Attachment B).

X. RECOMMENDATION

This decision document represents the selected removal action for the Lefton Iron and Metal Site, East St. Louis Cahokia County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site (see Attachment C). Conditions at the site meet the criteria of the NCP, 40 C.F.R. § 300.415 (b)(2) for a removal action, and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved, will be $3,158,447. Of this, an estimated $3,008,867 may be used for cleanup contractor costs. You may indicate your decision by signing below:

APPROVE : _____ for WEM DATE: 9/26/01
Superfund Division Director

DISAPPROVE: _____ DATE: _____
Superfund Division Director

Attachments:

A. Detailed Cleanup Contractor Estimate
B. Enforcement Confidential Addendum
C. Administrative Record Index

cc: C. Stanton, U.S. EPA HQ, 5202G
M. Chezik, U.S. Department of Interior, **w/o Enf. Addendum**
B. Everetts, IL EPA, **w/o Enf. Addendum**
R. Cipriano, IL EPA, **w/o Enf. Addendum**
S. Davis, IL DNR, **w/o Enf. Addendum**

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NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

Attachment A

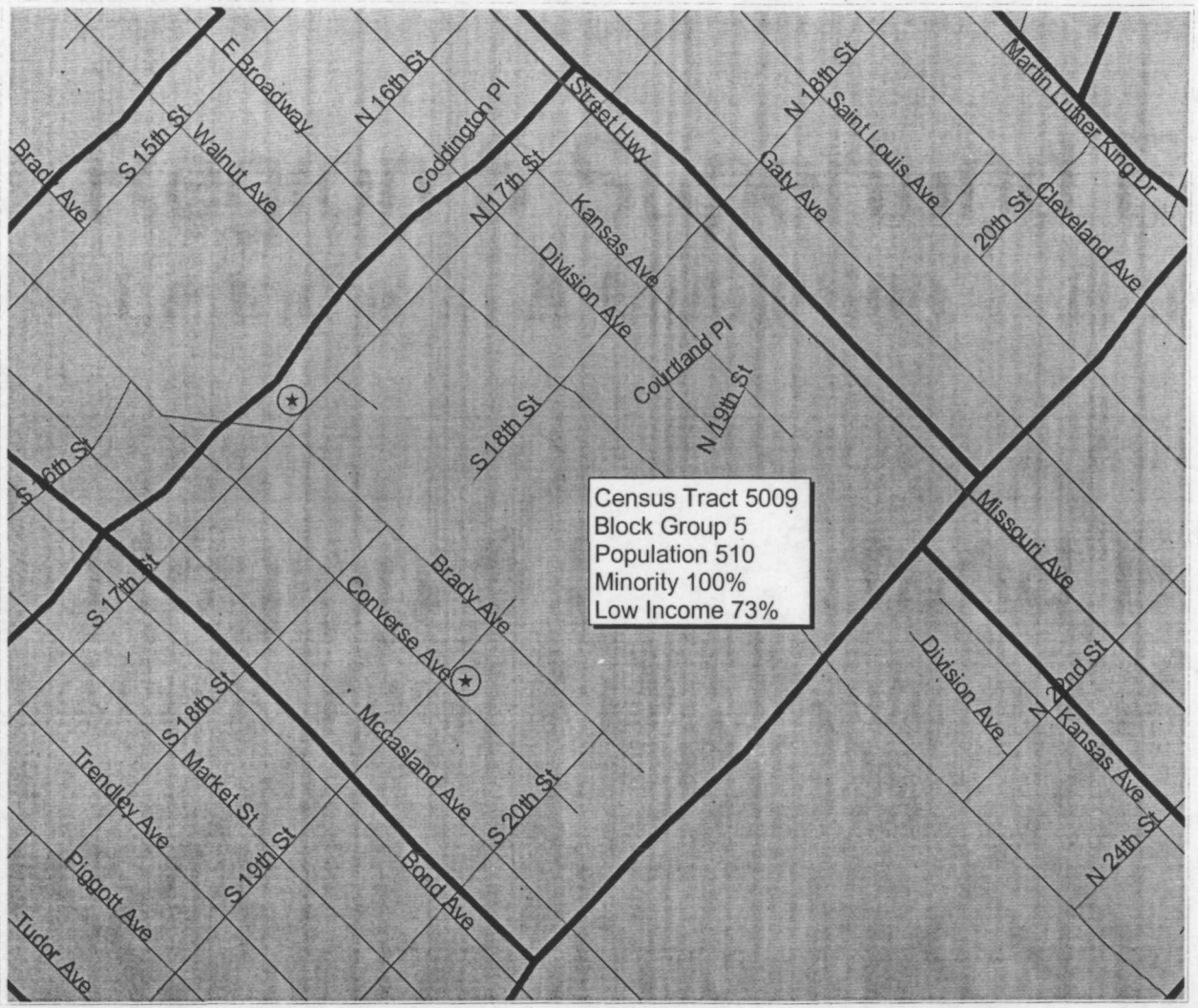
DETAILED CLEANUP CONTRACTOR ESTIMATE
LEFTON IRON AND METAL SITE
EAST ST. LOUIS,CAHOKIA COUNTY, ILLINOIS
SEPTEMBER 2001

The estimated cleanup contractor costs necessary to complete the removal action at the Lefton Iron and Metal site are as follows:

Personnel	$576,725
Equipment	498,332
Subcontractors	394,550
Transportation and Disposal	1,015,000
TOTAL	$2,484,607

Region 5 Superfund EJ Analysis

Lefton Iron & Metal Site East St. Louis,IL



EJ Identification

Low Income and Minority Less than State Average

Low Income or Minority at or Greater than State Average

Low Income or Minority 2 Times or Greater than State Average
[meets Region 5 EJ Case criteria]

Site Location

Block Group Boundary

Region 5 EJ Case Criteria for Illinois
Minority: 50% or greater
Low Income: 54% or greater

U.S. EPA Region 5
Superfund GIS

Date of Map: 9/24/01

Source of Map: 1990 Census Database

ATTACHMENT B

ENFORCEMENT CONFIDIENTIAL ADDENDUM SEPTEMBER 2001

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ATTACHMENT C

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
LEFTON IRON AND METAL SITE
EAST ST. LOUIS, ST. CLAIR COUNTY, ILLINOIS

ORIGINAL
SEPTEMBER 24, 2001

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	00/00/00	Tetra Tech EM, Inc.	U.S. EPA	Site Assessment Report for the Lefton Iron and Metal Site **(PENDING)**	
2	00/00/00	Turner, K., M. Harris & T. Cook, U.S. EPA	Muno, W., U.S. EPA	Action Memorandum: Request for Approval of a $2 Million Exemption for a Time Critical Removal Action at the Lefton Iron and Metal Site **(PENDING)**	